

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A method of handing off a mobile station from an internal cellular communications network to an external mobile cellular communications network, the internal network being a packet switched network having a network controller, wherein the method comprising:

allocating at least one cell of the internal cellular network as a border cell, the at least one cell being adjacent cells of the external cellular network;

detecting the movement of said mobile station into said border cell;

when said mobile station is in the border cell and before a hand-off requirement is determined, predicting using a prediction algorithm that an actual handoff is likely to be required using a set of predetermined parameters associated with said mobile station;

~~generating an advance hand-off request in response to detecting said mobile station in the border cell and in accordance with a prediction algorithm which uses a set of predetermined parameters associated with said mobile station for determining when an~~ prediction algorithm predicts that the actual hand-off is likely to be required; and

setting up a communication channel in the external network in response to said advance hand-off request before the hand-off requirement for said mobile station is determined, said communication channel being ready for use by said mobile station when an actual hand-off is made.

2. (currently amended) The [[A]] method according to claim 1, wherein said network controller implements the actual hand-off to said communication channel in response to an actual hand-off request.

3. (currently amended) The [[A]] method according to claim 1, wherein said mobile station is in communication with a base transceiver station in the internal cellular communications network prior to hand-off.

4. (currently amended) The [[A]] method according to claim 3, wherein said predetermined parameters for use by said prediction algorithm includes timing advance information reported from the base station to the mobile station.

5. (currently amended) The [[A]] method according to claim 1, wherein the network controller ~~carries out the prediction and issues said hand-off advance request~~ performs said steps of predicting and generating.

6. (currently amended) The [[A]] method according to claim 5, wherein said hand-off advance request is issued in packet format via a packet communication path from the network controller to a network controller of said external network.

7. (currently amended) A network controller for use in an internal cellular communications network, said internal network is a packet switched network and comprises a

plurality of cells and including at least one border cell, said at least one border cell being adjacent cells of an external mobile cellular communications network having an external network controller, the internal network controller comprising:

means for detecting the movement of said mobile station into said border cell;

means for predicting, using a prediction algorithm, that an actual handoff is likely to be required using a set of predetermined parameters associated with said mobile station when said mobile station is in the border cell and before the actual handoff is required;

means for selectively issuing a hand-off advance request ~~in response to~~ when the ~~means for detecting~~ detects said mobile station in the border cell and ~~advising said network controller of said external network~~ said means for predicting predicts that a hand-off is likely to be required in accordance with ~~[[a]] the predetermined prediction algorithm which uses a set of predetermined parameters associated with said mobile station; and~~

~~means for setting up a communication channel with the external communications network for use by said mobile station when an actual hand-off request is made.~~

8. (currently amended) ~~The An internal cellular~~ The network controller according to claim ~~[[7]]~~ 15, comprising a base transceiver operable to set up an RF communication channel with said mobile station.

9. (currently amended) The ~~[[A]]~~ network controller according to claim 7, wherein said external network controller is in communication with said internal network controller by a packet communication path for transmission of said hand-off advance request.

10. (currently amended) The [[A]] method according to claim 2, wherein said mobile station is in communication with a base transceiver station in the internal cellular communications network prior to hand-off.

11. (currently amended) The [[A]] method according to claim 2, wherein the internal cellular communications network comprises an internal network controller which carries out the prediction and issues said hand-off advance request.

12. (currently amended) The [[A]] method according to claim 3, wherein the internal cellular communications network comprises an internal network controller which carries out the prediction and issues said hand-off advance request.

13. (currently amended) The [[A]] method according to claim 4, wherein the internal cellular communications network comprises an internal network controller which carries out the prediction and issues said hand-off advance request.

14. (currently amended) The [[A]] network controller according to claim 8, wherein said external network controller is in communication with said internal network controller by a packet communication path for transmission of said hand-off advance request.

15. (currently amended) An internal cellular communications network, said internal network is a packet switched network and comprises a plurality of cells and including at least one border cell, said at least one border cell being adjacent cells of an external mobile

cellular communications network having an external network controller, the internal cellular communication network comprising:

means for detecting the movement of said mobile station into said border cell;

means for predicting, using a prediction algorithm, that an actual handoff is likely to be required using a set of predetermined parameters associated with said mobile station when said mobile station is in the border cell and before the actual handoff is required;

means for selectively issuing a hand-off advance request ~~in response to~~ when the
~~means for detecting~~ detects said mobile station in the border cell and ~~advising said network controller of said external network~~ said means for predicting predicts that a hand-off is likely to be required in accordance with ~~[[a]] the predetermined prediction algorithm which uses a set of predetermined parameters associated with said mobile station;~~ and

means for setting up a communication channel in the external communications network in response to said advance hand-off request and before the actual hand-off is required for said mobile station such that said communication channel is ready for use by said mobile station when an actual hand-off request is made.